1.0 INTRODUCTION

Note: Click here for Lessons Learned that may apply to the requirements contained in this LIR.

A separate, formal process is required to demonstrate that it is safe to start or restart facilities/activities involving the potential for significant hazards to workers, public, or the environment. A flowchart providing a high-level view of the readiness process is provided in Attachment 4.

Guidance Note: The requirements and guidance for performing readiness reviews are contained in the following DOE and federal documents.

- DOE Order 425.1B
- AL SD 425.1B
- DOE-STD-3006-2000
- DOE-HDBK-3012-96
- 29 CFR 1910.119

This LIR complements LAUR-98-2837, Integrated Safety Management Description Document.

2.0 SCOPE AND APPLICABILITY

This LIR describes the implementation requirements that must be implemented for the startup and restart of nuclear, radiological and hazardous, non-nuclear operations at LANL. This LIR shall apply to all Laboratory organizations conducting hazardous non-nuclear, nuclear, and radiological operations.

3.0 PRECAUTIONS AND LIMITATIONS

Guidance Note: Operational Readiness Reviews and Readiness Assessments are intended to provide an independent review of readiness to start or restart an activity and shall not be used as tools to achieve operational readiness.

In those cases where DOE is the owner of the facility/operation but a separate federal law dictates the readiness review process for construction, authorization or operation of a facility, those applicable federal law requirements shall supercede DOE requirements.

Guidance Note: For example, in the case of the start of a biological laboratory facility where the Center for Disease Control is the responsible agency for the whole process, their start-up/restart requirements will dictate how the readiness review is conducted as long as they meet or exceed the requirements stated in this LIR and in the DOE readiness process.

The requirements of LIR 301-00-02, “Exceptions or Variances to Laboratory Operations Requirements” shall be followed for exceptions and variances to the requirements contained in this document.

4.0 DEFINITIONS

Activity—A process or group of processes that produces a product and is generally managed and funded as a project.

Authorization Authority (AA) --- The official responsible for the startup/restart of a hazardous facility/activity as defined in DOE Order 425.1C and AL SD 425.1B.

Breadth---The set of core requirements evaluated by the Readiness Review team during conduct of the Readiness Review.

Core requirement---A fundamental area or topic of review evaluated during a readiness review to assess whether a facility can be operated safely.

> **Guidance Note:** The core requirements are subdivided into 18 core objectives to facilitate definition of the breadth of readiness reviews and to facilitate development of review criteria. Core Requirements (CR) are prescribed in DOE 0rder 425.1C. Core Requirements and Core Objectives (CO) are included in Attachment 3 of this LIR.

Corrective Action Plan---A defined and documented strategy for the correction of findings, which defines the deficiency, describes the actions that will be taken, assigns responsibility for the actions, discusses how the actions will address and correct the finding, and indicates the dates by which the actions will be complete.

Criteria---Rules and tests against which the quality of performance for a core requirement can be measured.

> **Guidance Note:** Fundamental criteria are based on DOE Orders, policies, and on other statutory requirements. Additional criteria may be based on Nuclear Regulatory Commission (NRC) regulations, Institute of Nuclear Power Operations (INPO) guides, professional codes and standards, best industry practices, Appendix G of the UC contract, and Work Smart Standards.

Criteria Review and Approach Documents (CRADs)---the documents used in the implementation plan to establish the depth of the readiness review and provide guidance to the readiness review team members.

Depth---The depth of review relates to the level of analysis, documentation or action by which a particular review objective is assessed.

> **Guidance Note:** The depth to which different review objectives assessed may vary within an individual readiness review. Depth could vary from a simple records review to a detailed assessment including review of all records, all references, and all involved individuals and physical spaces. The depth of the review is described in the Implementation Plan (see definition below).

Directed shutdown---An unscheduled termination of program operations or activities directed by contractor management, local DOE officials, or by DOE Headquarters.

Facility--- Any equipment, structure, system, process, or activity that fulfills a specific purpose (see LIR 300-00-05 .

> **Guidance Note:** Examples include accelerators, storage areas, fusion research devices, nuclear reactors, production or processing plants, coal conversion plants, magneto hydrodynamics experiments, windmills, radioactive waste disposal systems and burial grounds, environmental restoration activities, testing laboratories, research laboratories, transportation activities and accommodations for analytical examinations of irradiated and non-irradiated components.

Facility Hazard Categorization---Categorization of a facility based on hazards and consequence analysis. (see LIR300-00-05, *Facility Hazard Categorization)*

Facility shutdown--- (1) The situation in which a reactor is taken subcritical either manually or automatically to a safe shutdown condition, or (2) the condition in which a nonreactor nuclear facility ceases program work.

Guidance Note: In a shutdown condition, a facility should still meet all applicable technical safety requirements and environmental, safety, and health requirements.

Final Report--- A document prepared by the readiness review team at the completion of the review.

Guidance Note: The final report contains the methodology used to conduct the review, the conclusions and findings drawn by the team, and lists recommendations as to the readiness of the facility being reviewed to start program work.

Finding---An identified deficiency that may be classified by the Operational Readiness Review/Readiness Assessment team as either pre-start or post-start.

Pre-start finding - A finding that must be corrected before an activity can be started.

Post-start finding - A finding that must be corrected, but may be corrected after the start of the activity. Post-start findings must be addressed by a corrective action plan that includes any compensatory measures taken.

Graded approach---The process by which the level of analysis, documentation, and actions required to implement a requirement are commensurate with: (1) the relative importance to safety, safeguards, and security; (2) the magnitude of any hazard involved; (3) the life cycle stage of a facility; (4) the programmatic mission of a facility; (5) the particular characteristics of a facility; (6) the complexity of the weapons-related or research activity; and, (7) any other relevant factor.

Hazards analysis--- The functions, steps, and criteria for design and plan of work, which identify hazards, provide measures to reduce the probability and severity potentials, identify residual risks, and provide alternative methods of further control. See also the definition for “hazards analysis” in LIR 300-00-05, *Facility Hazard Categorization* .

Implementation Plan --- The document that defines the type, level, depth, and methodology for a readiness review.

Management Self-Assessment (MSA)--- A review of a facility or activity conducted by the responsible line manager to assess preparedness for startup/restart of an activity.

Objective evidence---Any documented statement of fact, other physical condition information, or record (either quantitative or qualitative) pertaining to the quality of an item or activity based on observations, measurements, or tests which can be independently verified.

Operational Readiness Review (ORR) --- An ORR is a disciplined, systematic, documented, performance-based examination of facilities, equipment, personnel, procedures, and management control systems.

Guidance Note: Its purpose is to ensure that a facility will be operated safely within its approved safety envelope as defined by the facility safety basis and applicable Laboratory and DOE requirements.

Owning Division Leader (ODL) —The Laboratory division leader to whom landlord and line manager responsibility for a facility management unit or a related facility is assigned.

Plan of Action (POA) --- The document prepared by the responsible line manager and approved by the Authorization Authority that describes the breadth of the ORR/RA and the prerequisites, which must be met to start the ORR/RA.

Guidance Note: It is the document by which line management defines what will be evaluated by the ORR/RA.

Readiness Assessment (RA)--- A review that is conducted to determine a facility’s/activity’s readiness to startup or restart when an ORR is not required or when the contractor’s standard procedure for startup is not judged by the contractor or DOE management to provide a required verification of readiness.

Readiness Review (RR)--- For the purpose of this LIR, a generic term that addresses all types of reviews to determine readiness, including ORRs, RAs, and MSAs.

Restart--- The recommencement of programmatic work.

Guidance Note: Restarts in operating facilities may require an ORR/RA even if the same program work is ongoing in some other portion of the operating facility.

Review approach---A description of what the technical experts (team members) will examine and how the examination will be conducted to gather objective evidence that the criteria have been met.

Guidance Note: The review approach consists of a sampling of documents, hardware, people, and performance. These are alternatively termed Criteria and Review Approaches (CRAs) or Criteria and Review Approach Documents (CRADs).

Safety analysis---A documented process to: (1) provide systematic identification of hazards within a given DOE operation; (2) describe and analyze the adequacy of the measures (systems, procedures, and administrative controls) taken to eliminate, control, or mitigate identified hazards; and (3) analyze and evaluate potential accidents and their associated risks.

Safety basis--- The combination of information relating to the control of hazards at a nuclear facility (including design, engineering analyses, and administrative controls) upon which the DOE depends for its conclusion that activities at the facility can be conducted safely. Safety Basis includes hazard classification documents, Safety Analysis Reports (SAR), Technical Safety Requirements (TSRs), and DOE-issued safety evaluation reports (SER), and facility specific commitments made to comply with DOE nuclear safety requirements.

Scope---The overall magnitude of the readiness review as defined by the breadth of core requirements selected and depth of evaluation of the core requirements during conduct of the review. The scope provides the bounding conditions for a readiness review.

Startup---The initial operation of a facility or process to perform program work.

Startup Notification Report--- A periodic report by each responsible contractor to identify future nuclear facility new starts and restarts—usually those scheduled in the next year. The report identifies the facility and based on the criteria in this LIR specifies whether an ORR or an RA is required.

5.0 GENERAL IMPLEMENTATION REQUIREMENTS

5.1 Owning Division Leader shall

- Designate a Division Readiness Review Coordinator as a point of contact for all matters related to readiness reviews,
- Serve as the Authorization Authority for selected readiness reviews,
- Approve the proposed Readiness Review Team Leader.

5.2 Safety-Responsible Line Manager or Designee shall

- Determine if a formal readiness review is required for a facility/activity using the DOE and the Laboratory readiness review process,
- Serve as the Authorization Authority for selected readiness reviews,
- Develop the Plan of Action (POA) for an ORR/RA,
- Assist the Readiness Review Team Leader with obtaining the resources (including team members) for performing a review,
- Serve as the approval authority for Management Self-Assessments (MSA),
- Be responsible for the readiness preparations for the facility/activity,

- Be actively involved in the process to prepare the facility/activity for operation,
- Issue a Readiness to Proceed Memorandum (see Attachment 5) after the MSA and prior to proceeding with the Laboratory ORR/RA.

5.3 Readiness Review Team Leader shall

- Ensure that all Readiness Review Team Members are trained,
- Aid in the selection of the Readiness Review Team Members,
- Develop the Implementation Plan,
- Conduct the readiness review,
- Terminate the readiness review if, in his or her judgment, the facility/activity responsible line manager prematurely declared readiness,
- Prepare the final report.

5.4 Readiness Review Team Members shall

- Participate in developing the implementation plan,
- Conduct those portions of the review assigned to his/her functional area,
- Provide input to the final report,
- Attend the required meetings in support of readiness reviews.

5.5 Division Readiness Review Coordinator shall

- Prepare and submit Startup Notification Reports to the Performance Surety Readiness Coordinator as described in Section 6.3 of this document,
- Identify the requirement for and participate in the review and approval of changes to the requirements contained in this LIR and supporting documents,
- Serve as the technical assistant and advisor to the Division and responsible line managers, readiness review team leader and team members,
- Ensure that any division/facility-specific readiness review requirements are consistent with the requirements contained in this LIR,
- Serve as the readiness review liaison between DOE representatives and responsible Division managers.

5.6 Performance Surety Readiness Coordinator shall

- Submit the annual and updated Startup Notification Reports in accordance with
- DOE Order 425.1B and DOE-AL SD 425.1B,
- Coordinate resolution of Startup Notification Report issues between LANL and DOE- Los Alamos Site Office (LASO) representatives,
- Provide readiness review training consistent with section 7.0 of this document,
- Coordinate the revision, review, and approval of the requirements contained in this LIR and supporting documentation.

5.7 Authorization Authority shall

- Approve the Startup Notification Report and the Plan of Action,
- Authorize startup/restart of nuclear and hazardous non-nuclear facilities/activities after completion of the readiness process,
- Provide a letter to the responsible line manager granting authorization to commence activities.

Guidance Note: In many cases the DOE is the Authorization Authority. Authorization Authority responsibilities cannot be assigned to the DOE by this LIR. However, when DOE is the designated Authorization Authority, activities may not commence until the responsible line manager receives a letter from the DOE granting such authorization.

6.0 SPECIFIC IMPLEMENTATION REQUIREMENTS – **Any changes to the requirements contained in this entire 6.0 Section must be submitted to DOE/LASO for review and concurrence.**

6.1 Readiness Review Entry Conditions

A formal readiness review shall not be required unless one of the following entry conditions apply:

- The facility/activity is an initial start-up,
- The facility/activity has been formally shutdown or it is shutdown for an extended period and must restart (see "directed shutdown" and "facility shutdown" in Section 4.0 Definitions),
- Facility changes require a modification of the safety basis,
- Substantial process, system, or facility modification,
- DOE mandates a review for other reasons.

6.2 Types of Readiness Review

There are three types of readiness reviews: Management Self-Assessments (MSA), Readiness Assessments (RA), and Operational Readiness Reviews (ORR) thus, the type of review required shall be dependent on the hazard categorization for the facility/activity.

Guidance Note: Facilities are categorized in accordance with the requirements of LIR 300-00-05, *Facility Hazard Categorization*. For the purpose of readiness, activities are also categorized as described in LIR 300-00-05 (Note: this categorization typically differs from activity risk categorization as defined in LIR 300-00-01, *Safe Work Practices*).

Tables 1 and 2 in Attachment 1 provide the criteria that must be used in determining the type of review required.

The breadth of a readiness review must be defined by core requirements that address how readiness must be demonstrated (see Attachment 3). Table 6.1 below summarizes the readiness review requirements that shall be implemented:

Table 6.1 Readiness Review Minimum Requirements

Type	Minimum Core Requirements (see Attachment 3)	Minimum Documentation Requirements	Authorization Authority
ORR	1 through 15	Startup Notification Report Plan of Action Implementation Plan Final Report	DOE/HQ or designee
Level 1 RA	1 through 15	Startup Notification Report Plan of Action Implementation Plan Final Report	DOE/LASO or DOE/AL
Level 2 RA	4 - 10, 12 and 13	Startup Notification Report Plan of Action Implementation Plan Final Report	Owning Division Leader or DOE/LASO
Level 3 RA	4, 6, 8, 10, and 12 (nuclear) 4, 8, 10, and 12 (non-nuclear)	Startup Notification Report Plan of Action Checklist (in lieu of an Implementation Plan) Final Report	Owning Division Leader or Safety-Responsible Line Manager designated in SNR
Level 4 RA	as determined by the safety-responsible line manager (4, 6 *Quality Assurance and Radiological Controls*, 7, 8, 10, and 12 are normally considered for verification of a new Safety Basis in and operational nuclear facility)	Startup Notification Report (including the Core Requirements) Plan of Action Checklist (in lieu of an Implementation Plan) Final Report	Owning Division Leader or Safety-Responsible Line Manager designated in SNR
Level 5 RA	as determined in the DOE conditions of approval of a Safety Basis document or revision	Startup Notification Report Plan of Action Checklist (in lieu of an Implementation Plan) Final Report	Safety-Responsible Line Manager, unless otherwise specified in the conditions of approval
MSA	as determined by the safety-responsible line manager	Checklist	Safety-Responsible Line Manager

6.3 Startup Notification Report

A Startup Notification Report must be submitted to the Performance Surety Readiness Coordinator as soon as startup/restarts are anticipated. The Performance Surety Readiness Coordinator must

forward the Startup Notification Report to the DOE so that they may approve and prepare for the readiness review. DOE concurrence shall be required for the proposed startup or restart method and scope of the assessment described in the Startup Notification Report.

The Startup Notification Report must be used to provide formal notification to the DOE that an ORR or level 1 through 5 readiness assessment is anticipated for the startup/restart of a facility or activity. It must describe the facility or activity to be reviewed, the level of review to be conducted, the justification for the level of review, and identifies the proposed Authorization Authority. Changes to anticipated startup/restart actions must be submitted to the Performance Surety Readiness Coordinator as they become known. Those changes shall be communicated by the Performance Surety Readiness Coordinator to the DOE.

> **Guidance Note:** Requirements for preparation of Startup Notification Reports, and a sample Startup Notification Report, are contained in Attachment 2. The Startup Notification Report online form (Form 2063) is located at http://enterprise.lanl.gov/esh.htm .

6.4 Management Self-Assessment (MSA)

As determined by the requirements for startup/restart contained in this LIR, the safety-responsible line manager for the facility/activity must conduct a management self-assessment. An MSA shall always be required prior to an ORR or RA conducted in accordance to the scope of the Start-up Notification Report. For startup/restart of lower hazard activities/facilities, the MSA shall serve as a stand-alone process for determining readiness (see Tables 1 and 2 in Attachment 1). The safety-responsible line manager must select the team members to conduct the MSA.

> **Guidance Note:** The MSA may take the form of a simple checklist or a complete evaluation resembling an RA depending on the complexity of the operation and the nature of the risks involved. Facilities that have a self-assessment process that meets the intent of the MSA may use that process.

A Start-up Notification Report, Plan of Action, and an Implementation Plan shall not be required if an MSA alone is required to confirm readiness. However, if an MSA is being proposed in lieu of another readiness review level as required by Tables 1 and 2 in Attachment 1, an SNR shall be submitted with a justification for the proposed level of review (i.e. an MSA) and DOE concurrence shall be required.

> **Guidance Note:** For readiness activities requiring only an MSA, the safety-responsible line manager shall ensure that the MSA is used as a verification tool and not as a tool to get ready.

A copy of the MSA final report must be provided to the Laboratory ORR/RA team, as applicable. This report shall state how the evaluation was conducted and the results of the evaluation including any issues. The MSA final report must describe what was reviewed, the conditions found and the issues discovered. Within the final report, all issues should be identified as Pre-start, Post-start, Observation, or Noteworthy Practice; pre- and post-start are typically referred to as “findings”. Declaration of readiness (either “Readiness to Proceed” or “Readiness to Operate”) by the responsible line manager shall be made only when the facility/activity is ready to operate and shall not be made in order solely to begin the next step in the readiness process such as the Laboratory

ORR or RA. All MSA pre- and post-start findings must be addressed and documented in accordance with local procedures.

The Responsible Line Manager may proceed with the Laboratory ORR/RA with a small and manageable number of pre-start findings from the MSA, but these findings must not be of a nature to prevent the Laboratory ORR/RA team from being able to observe operations and to conduct the confirmation required by the Plan of Action and the Implementation Plan/Checklist. Additionally, the RLM must have a clear path for resolution of unresolved pre-starts that does not impact on the ability to assess any objective or criterion prior to declaration of readiness. A Readiness to Proceed Memorandum (see Attachment 5) shall be required after the MSA in order to proceed with the Laboratory ORR/RA. Any pre-start findings that cannot be resolved prior to proceeding with the Laboratory ORR or RA shall be listed in the Readiness to Proceed Memorandum.

6.5 Readiness Assessments (RA) and Operational Readiness Reviews (ORR)

Laboratory Readiness Assessments and Operational Readiness Reviews shall be required when the conditions defined in Tables 1 and 2 (Attachment 1) are met. The necessary documents shall consist of a Start-up Notification Report, a Plan of Action, Implementation Plan, Final Report, Corrective Action Plan and a letter from the Authorization Authority granting permission to startup (see Table 6.1 above).

If the Laboratory is the authorization authority for the readiness review, the responsible line manager shall provide a copy of the Plan of Action to the DOE Facility Representative (FR) for review, notify the FR prior to start of the review, provide a copy of the final report to the FR, and inform the FR prior to initiating operations.

6.5.1 Plan of Action

A Plan of Action shall be required for all RAs and ORRs. The POA for an ORR or Level 1 and 2 RA's shall be completed as described in Paragraph 5.9.1 of DOE-STD-3006-2000. The POA shall establish the breadth of the readiness review (specific core requirements) by defining its technical and geographic scope. At a minimum, for Level 3, 4, and 5 RA's, the POA shall identify the breadth of the review (core requirements), assign the Team Leader responsible for conducting the review, identify the prerequisites for the assessment, and the projected dates for performance of the review. The Responsible Line Manager will, as part of their planning activity, ensure that team members of planned reviews are provided with the requisite reference material and evidence files in a timely manner. Use of lessons learned from previous readiness review activities will always be considered as part of the readiness planning process.

6.5.2 Implementation Plans (IP) and/or Readiness Checklists

The IP shall establish the depth of the review by identifying specific performance objectives, acceptance criteria, and review approaches that must be bounded by the scope of the POA. The IP shall also identify Readiness Review team members and assign responsibilities for functional areas, identify facility specific training requirements, and describe requirements/protocols governing the review. The Team Leader assigned to an assessment shall be responsible for developing and approving an IP for ORRs or Level 1 and 2 RAs. The Team Leader must define

the depth of the readiness review by applying the graded approach to the POA core requirements in the IP/Readiness Checklist.

Readiness Review team members for Laboratory ORRs and RAs requiring an IP shall be responsible for reviewing the requirements and performance objectives for the assigned functional area by developing Criteria Review and Approach Documents (CRADs) based on the core requirements identified as part of the readiness review (see Attachment 3).

The IP, or readiness checklist used in lieu of an IP, for a Level 3, 4, or 5 RA, shall be developed by the responsible line manager in consultation with the team leader and attached to the POA. Either document must cover the functional elements necessary to allow for a thorough review of the core requirements identified as part of the readiness review.

6.5.3 Conduct of the Readiness Assessment/Operational Readiness Review

RAs and ORRs shall be performance-based reviews. Readiness review team members shall perform interviews, witness tests, and evaluate criteria to ensure that the activity is ready to commence operation. Team members will use previous review lessons learned as appropriate during their reviews. They shall also review the activity process description, process flow diagram, hazard assessment, hazard analysis, technical safety requirement implementation if appropriate, Authorization Agreement, and other project documentation against the criteria established in the CRADs or checklists. Team members must also identify additional documentation that may be required or missing. Each team member must ensure that responsible line manager(s) understand review expectations before the start of the review. The RR Team Leader shall suspend the RR if a determination is made that a declaration of readiness is premature. In that event, the RR Team Leader will immediately notify the Owning Division Leader. The RR will remain suspended until the ODL reaffirms readiness to proceed.

6.5.4 Documentation, Final Report, and Authorization for Startup

The documentation generated during the ORR/RA must clearly identify what was evaluated and the methodology used during the evaluation. When the assessment is complete, the Team Leader shall issue a written final report that lists identified deficiencies. All ORRs and RAs shall require a final report. The final report must describe what was reviewed, the conditions found and the issues discovered during the assessment that must be resolved before declaring readiness for operations. For ORRs and Level 1 and 2 RAs the content and format defined in DOE-STD-3006-2000, Paragraph 5.9.3, must be used. LIG 300-00-08, *LANL Readiness Review Process*, when published will provide additional information and a sample format for the development of a final report.

> **Guidance Note:** Level 3, 4, and 5 RAs, using a readiness checklist in lieu of an IP, may have a final report in a checklist format that addressed the checklist items from the POA.

A Readiness to Proceed Memorandum (see Attachment 5) shall be required after the Laboratory ORR/RA in order to proceed with a DOE ORR/RA, if required. Any pre-start findings that cannot be resolved prior to proceeding with the DOE ORR or RA shall be listed in the Readiness to Proceed Memorandum.

Closure of all pre- and post-start findings must be documented. All pre-start findings must be formally closed prior to commencing with activities. After the final required readiness review, once all pre-start findings are closed, and post-start findings are either closed or covered in a corrective action plan, the safety-responsible line manager shall submit a memo requesting approval for startup/restart to the AA. Activities may not commence until a letter is then received by the safety-responsible line manager from the AA granting such approval.

7.0 TRAINING AND QUALIFICATIONS

The Performance Surety Readiness Coordinator will develop training in accordance with DOE Order 425.1B and AL SD 425.1B. This training will be required for team members and team leaders and will assist the Laboratory managers and their staff in preparing for a Readiness Review. The Performance Surety Readiness Coordinator shall assist with the readiness process and conduct training or provide training materials, as required, to satisfy the implementation requirements contained in this LIR.

Team Leaders and members participating in Laboratory readiness reviews must be independent of the facility/activity to be reviewed or at a minimum must not evaluate their own work. Team Leaders must determine and document that team members have technical knowledge of the area assigned for evaluation (including experience working in the technical area), knowledge of performance based assessment processes and methods, and knowledge of facility-specific information. For higher-level reviews (ORRs, Level 1 and 2 RAs) the team leader shall be from another division. The Owning Division Leader must make the final decision when independence is in question.

8.0 CHANGE CONTROL

In addition to meeting the requirements contained in IMP311.0, *Institutional Policies, Implementation Procedures, and Related Documents* , changes to the requirements contained in Section 6.0 and Attachment 1 of this LIR shall be submitted to the DOE LASO for review and concurrence.

9.0 REFERENCES

Number	Title
DOE Order 5480.19	*Conduct of Operations Requirements for DOE Facilities*
DOE Order 425.1B	*Start-up and Restart of Nuclear Facilities*
DOE/SD AL 425.1B	*Start-up and Restart of AL Activities*
DOE-STD-3006-2000	*Planning and Conduct of Operational Readiness Reviews (ORR)*
DOE-HDBK-3012-96	*Guide to Good Practices for Operational Readiness Reviews (ORR) Team Leaders Guide*
LIR 220-01-01	*Construction Project Management*
LIR 230-03-01	*Facility Management Work Control*
LIR 300-00-01	*Safe Work Practices*
LIR 300-00-05	*Facility Hazard Categorization*

LIR 300-00-06	*Nuclear Facility Safety Authorization*
LIR 300-00-07	*Non-nuclear Facility Safety Authorization*
LIR 301-00-02	*Variances and Exceptions to Laboratory Operations Requirements*
LIR 401-10-01	*Stop Work and Restart*
LPR 270-02-00.0	*Performance Assessment of Operating Limits and Start-up Tests*
29 CFR 1910.119	*Process safety management of highly hazardous chemicals*

10.0 DOCUMENT OWNERSHIP

The Office of Institutional Coordination for this LIR shall be the Performance Surety Division.

11.0 ATTACHMENTS

Attachment 1, *Selection Criteria for Levels of Readiness Reviews*
Attachment 2, *Startup/Restart Notification Report (Startup Notification Report) Instructions and Format*
Attachment 3, *Readiness Assessment Core Requirements*
Attachment 4, *Readiness Review Process Flowchart*
Attachment 5, *Readiness to Proceed Memorandum Information and Format*

Attachment 1

Selection Criteria for Levels of Readiness Reviews

Table 1 - Selection Criteria for Levels of Readiness Reviews for Nuclear and Radiological Facilities
(Startup/Restart of Non-nuclear activities in an operational Nuclear Facility requires entry into Table 2)
(Category 1 is listed below in the event that a facility at LANL is ever assigned that category)

Description of Activity	Cat 1	Cat 2	Cat 3	Radiological
Initial start-ups of new nuclear facilities	Lab and DOE ORR	Lab and DOE ORR	Lab and DOE ORR	Lab RA Level 3
Restart after a nuclear facility unplanned shutdown directed by DOE management officials for safety or other appropriate reasons	Lab and DOE ORR	Lab and DOE ORR	Lab and DOE ORR	Lab RA Level 3
Nuclear facility restart following shutdown caused by opera outside safety basis*	Lab and DOE ORR	Lab and DOE ORR	Lab and DOE ORR	Lab RA Level 3
Restart after an extended shutdown for nuclear facilities	Lab and DOE ORR after 6 Months	Lab and DOE ORR after 12 Months	Lab and DOE RA Level 2 after 12 Months	Lab RA Level 3 after 24 Months
Restart of nuclear facilities after substantial process, system, or facility modifications that require changes in the safety basis* previously approved by DOE.	Lab and DOE ORR	Lab and DOE ORR	Lab and DOE RA Level 2	Lab RA Level 3
Restart of nuclear facilities after substantial process, system, or facility modifications that do not require changes in the safety basis* previously approved by DOE.	Lab RA Level 2	Lab RA Level 2	Lab RA Level 3	MSA
Restart of nuclear facilities after minor process, system, or facility modifications that do not require changes in the safety basis* previously approved by DOE.	Lab RA Level 3	Lab RA Level 3	MSA	MSA
Initial start-up of a nuclear activity within an operational nuclear facility after modifications that affect only the activity and DOE must approve the hazard analysis. (The category to the right means that the facility would be categorized at this level if this were the only activity in the	Lab RA Level 2 and DOE RA	Lab RA Level 2 and DOE RA	Lab RA Level 4 or 5 and Negotiated DOE RA	MSA

Description of Activity	Cat 1	Cat 2	Cat 3	Radiological
facility)				
Restart of a nuclear activity within an operational nuclear facility after modifications that affect only the activity and DOE must approve the hazard analysis. (The category to the right means that the facility would be categorized at this level if this were the only activity in the facility)	Lab RA Level 4 including the requirements of a Level 5	Lab RA Level 4 including the requirements of a Level 5	Lab RA Level 4 including the requirements of a Level 5	MSA
Initial start-up of a nuclear activity within an operational nuclear facility where modifications affect only the activity, and DOE is not required to approve the hazard analysis. (The category to the right means that the facility would be categorized at this level if this were the only activity in the facility)	Lab RA Level 3	Lab RA Level 3	Lab RA Level 3	MSA
Restart of a nuclear activity within an operational nuclear facility where modifications affect only the activity, and DOE is not required to approve the hazard analysis, or restart of an activity which has been dormant for 24 months or more. (The category to the right means that the facility would be categorized at this level if this were the only activity in the facility)	MSA	MSA	MSA	MSA
Confirmation of accomplishment of previously-planned and approved activities when the planning was reviewed by a higher level RR	Lab RA Level 4	Lab RA Level 4	Lab RA Level 4	MSA
**Negotiated restart of activities where specific, limited scope is agreed to by the facility and DOE, including implementation of a new Safety Basis* in an operational facility.	Lab RA Level 4	Lab RA Level 4	Lab RA Level 4	MSA
Safety Basis changes are approved by DOE with specific conditions of approval	Lab RA Level 5	Lab RA Level 5	Lab RA Level 5	MSA
Other routine shutdowns when management determines that review is required before start-up, or shutdowns directed by Laboratory	Lab RA Level 1, 2, 3 or 4	Lab RA Level 1, 2, 3 or 4	Lab RA Level 1, 2, 3 or 4	Lab RA Level 3 or MSA
Restart of a facility or activity after completion of significant maintenance where line management feels that readiness needs to be verified before shifting from	MSA	MSA	MSA	MSA

Description of Activity	Cat 1	Cat 2	Cat 3	Radiological
maintenance status to operational status.				
DOE deems that an RA is appropriate	Lab and DOE ORR/RA or Negotiated Lab RA Process	Lab and DOE ORR/RA or Negotiated Lab RA Process	Lab and DOE ORR/RA or Negotiated Lab RA Process	Lab and DOE RA or Negotiated Lab RA Process

*** Safety envelope as described in the FSP for Radiological facilities**

****DOE review may be required, particularly in the case of new Documented Safety Analyses.**

Table 2 Selection Criteria for Levels of Readiness Reviews for Hazardous Non-Nuclear Facilities/Activities

Description of Activity	Cat A	Cat B	Cat C
Initial start-ups of new non-nuclear facilities	Lab and DOE RA Level 1	Lab and DOE RA Level 1	Lab RA Level 3
Restart after a non-nuclear facility unplanned shutdown directed by DOE management officials for safety or other appropriate reasons	Lab and DOE RA Level 2	Lab and DOE RA Level 2	MSA
Non-nuclear facility restart following shutdown caused b outside safety basis*	Lab and DOE RA Level 2	Lab and DOE RA Level 2	MSA
Restart after an extended shutdown for non-nuclear facilit	Lab and DOE RA Level 2 after 6 Months	Lab and DOE RA Level 2 after 12 Months	MSA after 24 Months
Restart of non-nuclear facilities after substantial process, system, or facility modifications that require changes in the safety basis* previously approved by DOE.	Lab and DOE RA Level 2	Lab and DOE RA Level 2	MSA
Restart of non-nuclear facilities after substantial process, system, or facility modifications that do not require changes in the safety basis* previously approved by DOE.	Lab RA Level 3	Lab RA Level 3	MSA
Restart of non-nuclear facilities after minor process, system, or facility modifications that do not require changes in the safety basis* previously approved by DOE.	MSA	MSA	NA
Initial start-up or restart of an activity within an operational non-nuclear facility after modifications that affect only the activity and DOE must approve the hazard analysis. (The category to the right means that the facility would be categorized at this level if this were the only activity in the facility)	Lab RA Level 4 or 5	Lab RA Level 4 or 5	NA
Initial start-up of an activity within an operational non-nuclear facility where modifications affect only the activity and DOE is not required to approve the hazard analysis. (The category to the right means that the	Lab RA Level 3	Lab RA Level 3	MSA

Description of Activity	Cat A	Cat B	Cat C
facility would be categorized at this level if this were the only activity in the facility)			
Restart of an activity within an operational non-nuclear facility where modifications affect only the activity, and DOE is not required to approve the hazard analysis, or restart of an activity which has been dormant for 24 months or more. (The category to the right means that the facility would be categorized at this level if this were the only activity in the facility)	MSA	MSA	MSA
Confirmation of accomplishment of previously-planned and approved activities when the planning was reviewed by a higher level RR	Lab RA Level 4	Lab RA Level 4	MSA
Negotiated restart of activities where specific, limited scope is agreed to by the facility and DOE, including implementation of a new Safety Basis* in an operational facility.	Lab RA Level 4	Lab RA Level 4	MSA
Safety Basis changes are approved by DOE with specific conditions of approval	Lab RA Level 5	Lab RA Level 5	NA
Other routine shutdowns when management determines t review is required before start-up, or shutdowns directed Laboratory	Lab RA Level 1, 2, 3 or 4	Lab RA Level 1, 2, 3 or 4	MSA or Lab RA Level 3
Restart of a facility or activity after completion of significant maintenance where line management feels that readiness needs to be verified before shifting from maintenance status to operational status.	MSA	MSA	MSA
DOE deems that an RA is appropriate	Lab and DOE RA or Negotiated Lab RA Process	Lab and DOE RA or Negotiated Lab RA Process	Lab RA Level 3 or MSA

*** Safety envelope as described in the FSP for Cat C facilities and Standard Industrial facilities**

Attachment 2

Startup/Restart Notification Report (Startup Notification Report) Instructions and Format

The Startup Notification Report shall be completed and submitted on the form in this Attachment. This form is found at **http://enterprise.lanl.gov/esh.htm**

- The Division Readiness Coordinator shall fill in the date, the division title, the Division Readiness Coordinator's name, telephone number, fax number and email address. The Division Readiness Coordinator shall collect the information in the table for all ORRs and RAs projected for at least one year. If an MSA is the recommended authorization tool in this LIR, it shall not be required to be included it in the Startup Notification Report. If an MSA is justified, but not the recommended process in this LIR, it shall be included in the Startup Notification Report. Startup Notification Reports shall be unclassified, and classified or UCNI information shall be referenced to the documents for obtaining the information.

(The numbers below correspond to the numbers in the blocks listed on the following Start-up/Restart Notification Report.)

1. Number–A reference number to be used in approval correspondence. **For example: "NIS 01/01" NIS is the Division and 01 is the first Readiness Review of the calendar year of 2001.**

2. Title and category of the facility or activity to be reviewed –Title facility or activity and the category of the Facility or activity. **For example: "Non-Sealed Tube Neutron Generator, a Low-Hazard Non-nuclear Activity in a Category 2 Nuclear Facility."**

3. Type of review – Type and level of review as described in Tables 1 and 2 of Attachment 1 of this LIR. **For example: "Lab RA Level 5" Note: if an approach different than the one identified in the Tables is recommended, it shall be stated here and justified in item 10, below.**

4. Authorization authority – Proposed authorization authority described for the level of review of the hazard category described in Tables 1 and 2 of Attachment 1 and amplified in Section 6.3, **For Example: "NIS-18 Group Leader."** (In a declared emergency situation, the AA will be the Facility Recovery Manager (FRM), unless DOE declares otherwise in response to the Startup Notification Report.)

5. Targeted date for the review to begin – Estimated date to begin the Laboratory review and estimated date to begin the DOE review, if required. If no DOE review is required, insert NA. **For Example: "05/21/01 / NA.**

6. Program owner - The program owner shall be the DOE representative with primary interest in the startup/ restart. **For Example: "The sponsor is the DOE Office of Emergency Response."**

7. LASO recommendation to AA – LASO will review all of the Startup Notification Reports including those where LANL is the AA and approve those for which LANL and LASO are the AA. In that case this block would be marked NA. If a higher level of DOE is the AA, then LASO will recommend approval or other action in this block.

8. Approved by AA or LASO – The AA (or LASO if the AA is LANL) shall approve the Startup Notification Report approach for the Readiness Review described or other action. This block will be left blank until the approval is received. **Note: The Performance Assurance Readiness Coordinator, after approval is received, will enter this information. . For example: "Approved by LASO."**

9. Description of facility or activity - A brief description of the facility or activity. **For example: "This is a restart of a Kaman Nuclear Model A-1250, high-output neutron source to be operated in the basement of Building 127 at TA-18.**

10. Justification for this level review – A statement of why the recommended review is required as detailed in Tables 1 and 2 of Attachment 1. If a Level 4 Lab RA is required the Core Requirements for the review shall be listed. **For example: "This is the level of review described in the Lab LIR for restart of a low-hazard non-nuclear activity in a nuclear facility after DOE approval of a Hazard Analysis with conditions of approval."**

11. Program driver - The reason for conducting the review in the time frame described. The program is required to support what sort of activities? If there is no DOE driver, state the importance to the Laboratory. **For example: "This neutron generator is used solely as a research instrument to develop nuclear-based technologies to identify and image various materials. The sponsor funding ends at the end of the fiscal year."**

12. Reason for the review – An initial startup of a new facility or activity or, if a restart, state why the facility or activity was shutdown and include when operations were last conducted. **For example: "Operations of this neutron generator were not conducted from 1993 until present due to lack of funded requirements for its use. When restart was funded, it was determined that a hazard had not been analyzed. The Hazard Analysis was submitted to DOE and was approved with conditions."**

SAMPLE STARTUP/RESTART NOTIFICATION REPORT (Startup Notification Report)

DATE: _____ ; Activities where _____ is the Authorizing Authority

ORGANIZATION: LANL/(Division) POINT OF CONTACT:

TELEPHONE NUMBER – TELEFAX NUMBER – EMAIL ADDRESS –

NUMBER	TITLE AND CATEGORY OF FACILITY OR ACTIVITY TO BE REVIEWED	TYPE OF REVIEW	AUTHORIZATION AUTHORITY (AA)	TARGETED DATE FOR REVIEW TO BEGIN		PROGRAM OWNER	LASO Recommendation to AA	Approved by AA or LASO
				LABORATORY	DOE			
(1)	(2)	(3)	(4)	(5)	(5)	(6)	(7)	(8)
	Description of facility or activity: **(9)**							
	Justification for this level review: **(10)**							
	Program driver: **(11)**							
	Reason for the review: **(12)**							
(1) Repeat	(2)	(3)	(4)	(5)	(5)	(6)	(7)	(8)
	Description of facility or activity: **(9)**							
	Justification for this level review: **(10)**							
	Program driver: **(11)**							
	Reason for the review: **(12)**							

Form 2063 (12/01) LIR 308-00-08 (PERFORMANCE SURETY-CFS, OIC)

COMPLETED SAMPLE STARTUP/RESTART NOTIFICATION REPORT (Startup Notification Report)

DATE: January 15, 2001; Activities where LANL is the Authorization Authority
ORGANIZATION: LANL/NIS,
POINT OF CONTACT: NAME - Evelyn Mullen,
TELEPHONE NUMBER – 5-7576
TELEFAX NUMBER – 5-4109
EMAIL ADDRESS – **emullen@lanl.gov**

NUMBER	TITLE AND CATEGORY OF FACILITY OR ACTIVITY TO BE REVIEWED	TYPE OF REVIEW	AUTHORIZATION AUTHORITY (AA)	TARGETED DATE FOR REVIEW TO BEGIN		PROGRAM OWNER	LASO Recommendation to AA	Approved by AA
				LABORATORY	DOE			
NIS 01/01	Non-Sealed Tube Neutron Generator a Low-Hazard Non-nuclear activity in a Category 2 Nuclear Facility.	Lab RA Level 5	NIS-18 Group Leader	05/21/01	NA	The sponsor is the DOE Office of Emergency Response.	NA	Approved by LASO
	Description of facility or activity: Restart of a Kaman Nuclear Model A-1250 high-output neutron source to be operated in the basement of Building 127 at TA-18.							
	Justification for this level review: This is the level of review described in the Lab LIR for restart of a low hazard non-nuclear activity after DOE approval of a Hazard Analysis with conditions of approval.							
	Program driver: Sponsor funding ends at the end of the fiscal year. This Neutron Generator is used solely as a research instrument to develop nuclear-based technologies to identify and image various materials.							
	Reason for the review: Operations of this neutron generator were not conducted from 1993 until present due to lack of funded requirements for its use.							

NIS 02/01	Solution High Energy Burst Assembly (SHEBA) Category 2 nuclear activity operated in a Category 2 nuclear facility.	Lab RA Level 4	NIS Division Leader	04/10/01	NA	The program owner is DP-20.	NA	Pending Approvals
	Description of facility/activity: SHEBA is a solution-fueled benchmark critical assembly. It is a clean, free-field geometry, right-circular, cylindrically symmetric critical assembly utilizing either 5%-enriched uranyl fluoride solution. This low-enrichment fuel simulates commercial and DOE reactor fuel of a kind that would be processed in a spent-fuel processing or stabilization plant.							
	Justification for this level review: This review covering Core Requirements 1, 3, 4, 5, 6, 10, 12, 13, 15, 18 and verification of the conditions of approval from the DOE PISAUSQ approval letter. This is the appropriate Level review for Laboratory shutdown of the activity and restart after DOE approval of the USQ with conditions of approval.							
	Program driver: The SHEBA assembly is needed for demonstrations during the Criticality Safety Course scheduled for the week of April 23, 2001.							
	Reason for the review: SHEBA was shutdown by NIS–6 management on September 20, 2000, after discovery of a Potential Inadequate Safety Analysis (PISA).							

Attachment 3

READINESS ASSESSMENT CORE REQUIREMENTS

NOTE: The parenthetical and italicized comments relate to similar requirements from OSHA Regulations 29 CFR 1910.119, Process Safety Management of Highly Hazardous Chemicals by paragraph number.

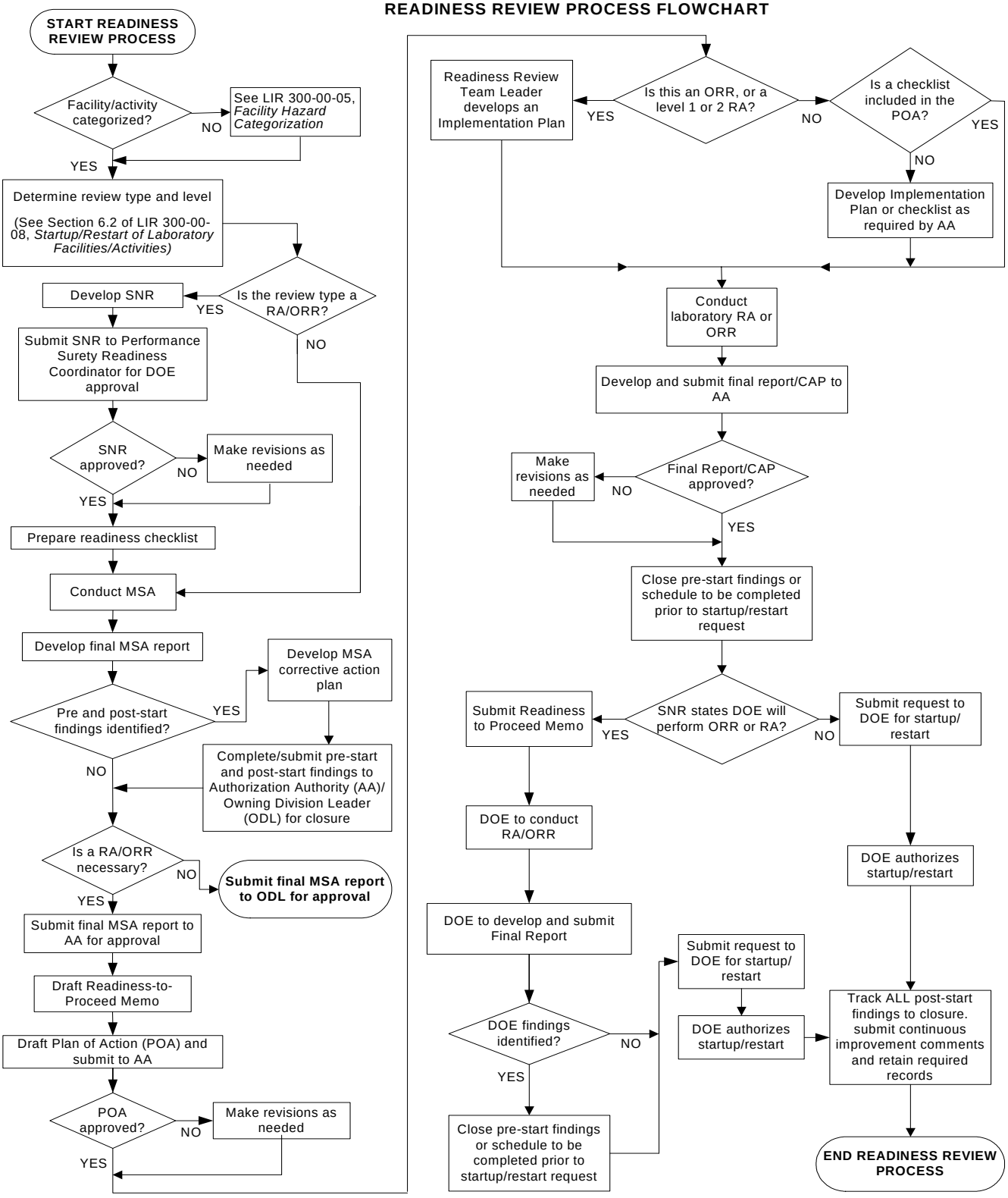
Core Requirements (from DOE Order 425.1B)

Criteria	Description
Guiding Principle #1 Line management is responsible for the protection of employees, the public, and the environment. Line management includes those contractor and subcontractor employees managing or supervising employees performing work.	
1	Line management has established programs to ensure safe accomplishment of work (the authorization authority should identify in the plan of action those specific infrastructure programs of interest for the start-up or restart). Personnel exhibit an awareness of public and worker safety, health, and environmental protection requirements and, through their actions, demonstrate a high-priority commitment to comply with these requirements. (CR #8) (CR #14) [*(h), Contractors*] [*(c), Employee participation*]
Guiding Principle #2 Clear and unambiguous lines of authority and responsibility for ensuring ES&H are established and maintained at all organizational levels.	
2	Functions, assignments, responsibilities, and reporting relationships [including those between the line operating organization and Environment, Safety and Health (ES&H) support organizations] are clearly defined, understood, and effectively implemented with line management responsibility for control of safety. (CR #11)
Guiding Principle #3 Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.	
3	The selection, training, and qualification programs for operations and operations support personnel have been established, documented, and implemented. The selection process and applicable position-specific training for managers ensure competence commensurate with responsibilities. (The training and qualification program encompasses the range of duties and activities required to be performed.) (CR #2)(CR#19) [*(g), Training; (j)(3), Training for process maintenance activities*] [*(h), Contractors*]
4	Level of knowledge of managers, operations, and operations support personnel is adequate based on reviews of examinations and examination results and selected interviews of managers, operating, and operations support personnel. (CR #3) (CR #19). [*(g)(3), Training documentation*] [*(h), Contractors*]

5	Modifications to the facility have been reviewed for potential impacts on training and qualification. Training has been performed to incorporate all aspects of these changes. (CR #18b) [*(l), Management of change*]
Guiding Principle #4 Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.	
6	Sufficient numbers of qualified personnel are available to conduct and support operations. Adequate facilities and equipment are available to ensure operational support services are adequate for operations. (Such support services include operations, training, maintenance, waste management, environmental protection, industrial safety and hygiene, radiological protection and health physics, emergency preparedness, fire protection, quality assurance, criticality safety, and engineering). (CR #8) (CR #13). [*(h), Contractors*]
Guiding Principle #5 Before work is performed, the associated hazards are evaluated and an agreed-upon set of standards and requirements is established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.	
7	Facility safety documentation is in place and has been implemented that describes the "safety envelope" of the facility. The safety documentation should characterize the hazards/risks associated with the facility and should identify preventive and mitigating measures (systems, procedures, administrative controls, etc.) that protect workers and the public from those hazards/risks. Safety structures, systems, and components (SSCs) are defined and a system to maintain control over their design and modification is established. (CR #4) [*(d), Process safety information; (e), Process hazard analysis; (j), Mechanical integrity; (l), Management of change*]
8	A program is in place to confirm and periodically reconfirm the condition and operability of safety SSCs. This includes examinations of records of tests and calibration of these systems. The material condition of all safety, process, and utility systems will support the safe conduct of work. (CR #5) [*(j)(4), Inspection and testing*]
9	The facility systems and procedures, as affected by facility modifications, are consistent with the description of the facility, procedures, and accident analysis included in the safety basis. (CR #15) [*(l), Management of change*]
Guiding Principle #6 Administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.	
10	Adequate and correct procedures and safety limits are in place for operating the process systems and utility systems that include revisions for modifications that have been made to the facility. (CR #1) (CR #18a) [*(f), Operating procedures; (j)(2), Written procedures.]* [*(l), Management of change*]

11	A routine drill program and emergency operations drill program, including program records, have been established and implemented. (CR #9) [*(n), Emergency plan and response*]
12	An adequate start-up or restart program has been developed that includes plans for graded operations and testing after start-up or resumption to simultaneously confirm operability of equipment, the viability of procedures, and the performance and knowledge of the operators. The plans should indicate validation processes for equipment, procedures, and operators after start-up or resumption of operations including any required restrictions and additional oversight. (CR #10) (see DOE-STD-3006-2000, Appendix 3 for clarification of the intent of this Core Requirement)
13	The formality and discipline of operations is adequate to conduct work safely, and programs are in place to maintain this formality and discipline (e.g., DOE 5480.19). (CR #12)
Guiding Principle #7 The conditions and requirements to be satisfied for operations to be initiated and conducted are established and agreed-upon by DOE and the contractor. These agreed-upon conditions and requirements are requirements of the contract and binding upon the contractor. The extent of documentation and level of authority for agreement shall be tailored to the complexity and hazards associated with the work and shall be established in a Safety Management System.	
14	Formal agreements between the operating contractor and DOE have been established via the contract or other enforceable mechanism to govern the safe operations of the facility. A systematic review of the facility's conformance to these requirements has been performed. These requirements have been implemented in the facility, or compensatory measures are in place and formally agreed to during the period of implementation. The compensatory measures and the implementation period are approved by DOE. (CR #7)
15	A feedback and improvement process has been established to identify, evaluate, and resolve deficiencies and recommendations made by oversight groups, official review teams, audit organizations, and the operating contractor (e.g., DOE P 450.5). (CR #6) [*(e)(5), The employer will establish a system to promptly address the teams findings and recommendations*]
Additional DOE Oversight Requirements include the following. (For DOE Reviews)	
16	The technical and managerial qualifications of those personnel at the DOE field organization and at DOE Headquarters who have been assigned responsibilities for providing direction and guidance to the contractor, including the Facility Representatives, are adequate (DOE Readiness Review only). (CR #16)
17	The breadth, depth, and results of the responsible contractor Readiness Review are adequate to verify the readiness of hardware, personnel, and management programs for operations (DOE Operational Readiness Review only). (CR #17) [*(I), Pre-start-up safety review*]
18	DOE operations office oversight programs, such as occurrence reporting, Facility Representative, corrective action, and quality assurance programs, are adequate (DOE Readiness Review only). (CR #20)

Attachment 4
READINESS REVIEW PROCESS FLOWCHART



Attachment 5

Readiness to Proceed Memorandum Information and Format

The Readiness to Proceed Memorandum is submitted in accordance with the guidance provided in paragraph 5.9.4 of DOE-STD-3006-2000. DOE O 425.1B, paragraph 4.b.(7), also discusses the necessary correspondence and requirements before the start of the DOE ORR.

The following format is intended to meet the intent of these requirements and the guidance provided.

For consistency, this form should be submitted after the MSA by the line manager responsible for preparing for the Lab RA/ORR to the designated Authorization Authority for the start of the Lab RA/ORR. If a DOE RA/ORR is required, then the Group Leader will submit another Memo to the DOE Authorization Authority through the ODD after the completion of the Lab RA/ORR.

Section 6.4 of this LIR discusses the timing of this memorandum and the process.

LANL/(Sending Org.)
Los Alamos National Laboratory
Post Office Box 1663
Los Alamos NM 87545
Phone: _____
Fax: _____ Ref: _____

Date: _____
Time: _____

Memorandum

To: (Designated Authorization Authority for this RR)

From: (Appropriate Line Manager)

Thru: (Owning Division Director if Required)

SUBJECT: Readiness to Proceed Memorandum with the (Title of the facility/activity Lab RA/ORR or DOE RA/ORR as appropriate)

The subject (Facility or Activity) has completed all of the required steps to proceed with the (Lab RA/ORR or DOE RA/ORR). The Prerequisites listed in the POA have been completed and applicable TSR-level controls have been independently verified to be properly implemented. The pre-start issues from the (MSA or the Lab RA/ORR) have been corrected and documented (or corrective action plans have been written and all of the actions will be completed before completion of the scheduled DOE RA/ORR). A manageable list of the outstanding issues is included in Attachment 1 to this memorandum. The Facility/Activity is ready to commence operations with the exception of the listed issues. None of the remaining issues will prevent demonstration of readiness to the (Lab RA/ORR or DOE RA/ORR.) and all issues have clear path to resolution.

The (MSA or Lab RA/ORR) has been completed and a copy of the final report is attached (has been provided) for your review. This report documents readiness of the Facility/Activity and recommends operation of the Facility/Activity.

It is requested that the (Lab RA/ORR or DOE RA/ORR) commence on (date).

Attachment 1 (to memo)

Remaining Issues before Operation of (_____)

Issue #	Description of Issue	Corrective Action Plan # (Attach Plan. If Plan is not completed, state when it will be completed))	Corrective Action Completion Date